CLAIMS

What is claimed is:

- 1. (Deleted)
- 2. (Deleted)
- 3. (Deleted)
- 4. (Deleted)
- 5. (Deleted)
- 6. (Deleted)
- 7. A system comprising:
 - a wafer comprising at least one layer;
 - a depth measurer to measure a thickness of a selected region of an exposed layer of the wafer; and

an etch tool to selectively remove a thickness of the exposed layer in response to the measured thickness being greater than a specified thickness of the exposed layer of the selected region.

- 8. The system of Claim 7, further comprising a control system to store a map associating thicknesses of the exposed layer for at least two regions of the exposed layer.
- 9. The system of Claim 7, wherein the exposed layer comprises a silicon layer.

-8-

10. The system of Claim 7, wherein the depth measurer comprises a spectroscopic elipsometry device.

42P15039D

- 11. The system of Claim 7, wherein the etch tool comprises a plasma generator.
- 12. The system of Claim 7, wherein the wafer comprises a silicon-on-insulator device further comprising a silicon layer separated from a substrate by an oxide layer.
- 13. An apparatus comprising:

a substrate;

a silicon layer; and

an oxide layer electrically insulating the silicon layer from the substrate, wherein a thickness of the silicon layer is formed by removing at least a portion of the silicon layer using a plasma generator.

- 14. The apparatus of Claim 13, wherein an amount to remove from a surface of the silicon layer is determined using a spectroscopic elipsometry device.
- 15. The apparatus of Claim 14, wherein the plasma generator removes at least a portion of the silicon layer based upon a map specifying thicknesses of at least two regions of the silicon layer.

42P15039D -9-